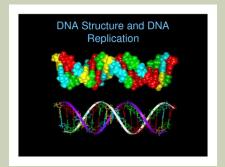
CANNABIS CULTURE

How will it change our efforts?

MICHAEL NERNEY and ASSOCIATES
P.O. Box 93
Long Lake, NY 12847-0093
(518) 624-5351
michaelfnerney@gmail.com

A DISEASE OF THE BRAIN WHO IS AT RISK?

Genetics



Environment















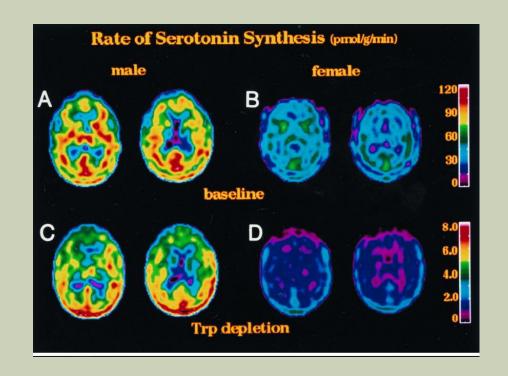
EMOTIONAL MOTIVATION

Responding to Feelings

Social Anxiety

Anger

Depression

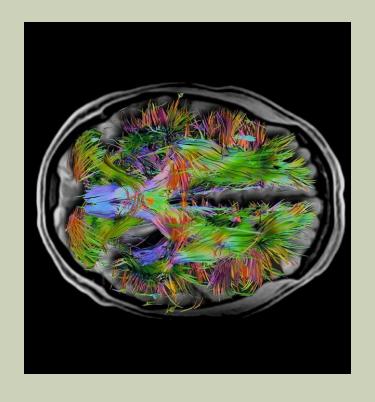


GENDER AND DRUGS



THE ADOLESCENT BRAIN FACTOR

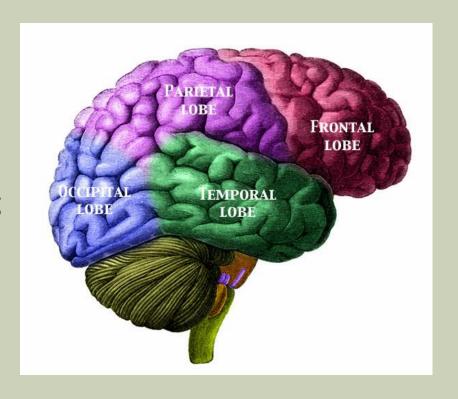
- Emotional Intensity
 - Ages 11 24 years
 - Amygdala
 - Hormones
 - Larger and more active
 - 2 to 4 times



THE ADOLESCENT BRAIN FACTOR, CON'T.

Risk Taking and Peers

- Change at 13 years old
- New sites appear in brain
- Emotional reward for risk taking
- Peer influence



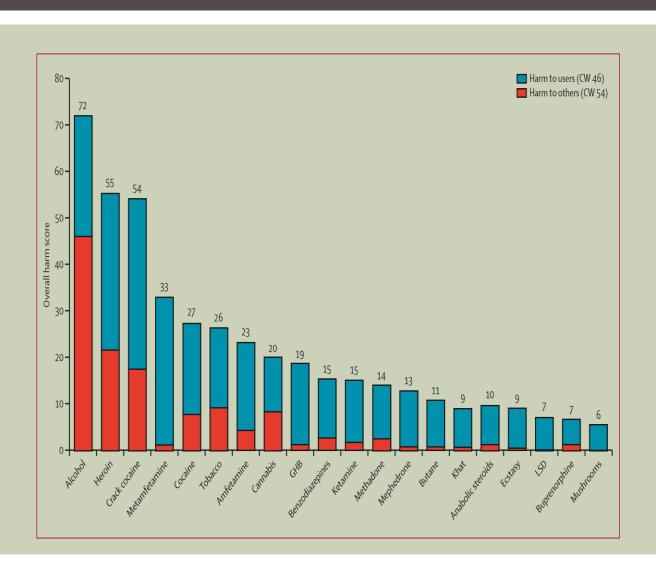
SCIENCE AND SOCIAL MEDIA

- Better Studies
 - Refute old studies
 - Medical properties, cancer, seizure disorder, pain
- Brain Imaging
- Daily Marijuana Use Is Not Associated with Brain Morphometric Measures in Adolescents or Adults
- The Journal of Neuroscience, 28 January 2015, 35(4): 1505-1512; doi: 10.1523/JNEUROSCI.2946-14.2015

NEW SCIENCE

- Psychology of Addictive Behaviors
- Chronic Adolescent Marijuana Use as a Risk Factor for Physical and Mental Health Problems in Young Adult Men
- Online First Publication, August 3, 2015. Helene R. White, Dustin Pardini,
 Jordan Bechtold, and Theresa Simpson,

SCIENCE AND SOCIAL MEDIA



MARIJUANA ONLINE

- Cut.com
 - Grandmas smoking weed
 - 20 million views

420 web sites

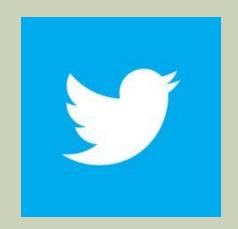
BRAIN FACTOR, CON'T.

Social Media

- YouTube, Tumblr, Facebook, Twitter
- Instant information
- Personal communication
- Possibly anonymous
- Nearly every young person has access









EMERGING RESEARCH

- Demographic
- Age, gender, set and setting
- Route of Administration
- Smoked, vaporized, eaten
- Potency
- Strength, % of cannabinoids
- Dose
- How much, how often

STRESS IN AMERICA-APA STUDY

13-23

Highest stress First time ever

27% Extreme stress 8-10

55% Moderate stress 5-7

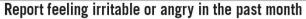
GIRLS VS BOYS



More teen girls than boys report symptoms of stress and are more likely to say stress impacts their happiness a great deal.

Their appearance is a significant source of stress

68% girls vs. 55% boys



45% girls vs. 36% boys

Feel bad when comparing themselves to others on social media

30% girls vs. 13% boys

How others perceive them on social media is a significant source of stress

39% girls vs. 29% boys

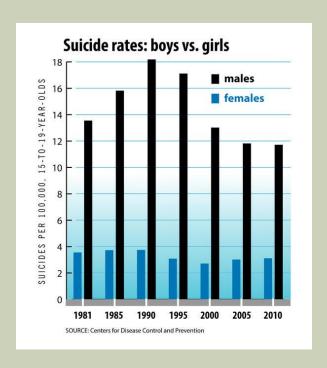
Say they feel pressure to be a certain way

34% girls vs. 22% boys



STRESS IN AMERICA

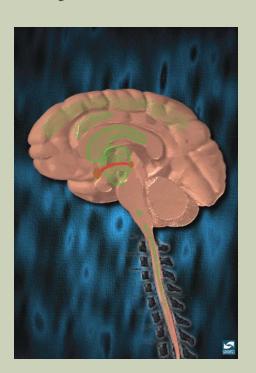
- Emotional cost
- Negative emotions
- Anxiety
- Depression
- Frustration
- Anger



Shift in age for suicidal behaviors

MOTIVATION FOR DRUG USE

- Seek drugs for:
 - Create positive effect in brain chemistry
 - Dopamine release in reward sites
 - Suppress negative emotions
 - Activation in specific sites



MARIJUANA MARKETING: SEX, BUDS, AND ROCK AND ROLL



MARIJUANA MARKETING: IT'S GOOD FOR YOU



MARIJUANA SUBSTITUTES

Wicked X, Posh, Dank, K2 Compliant, Shakabuku, Kush,

Bombay Blue, Aztec Gold

- "Not for human consumption"
 - Sold as potpourri or aromatherapy
- Discreet shipping
- Blend of herbal compounds may include:
 - Canavalia rosea, Clematis vitalba, Nelumbo nucifera,
 Pedicularis grandifolia, Heimia salicifolia,
 Leonurus sibiricus and Ledum palustre,
 Damiana, Lavender, Baybean, Yerba Mate

THE PRODUCTS: MARIJUANA SYNTHETICS

- Cannabinoids
- 3 experimental strands:
 - □ JWH-073, JWH-018, 200, 250
 - □ CP 47, CP 80
 - ☐ HU-210
 - Clemson University
 - John W. Huffman
 - Higher Potency



MARIJUANA SYNTHETICS: RESEARCH APPLICATION

- Animal Studies
- Medical Use of Cannabinoids
 - Pain management
 - Appetite regulation
- No human clinical trials
 - Tested on primates and rodents

MARIJUANA SYNTHETICS: DIVERTED TO THE PUBLIC

- K2, Spice, Blond, Standard, Spice Gold, Zohai, Serenity
 - 3-4 years under radar
 - 2009 testing showed few herbal compounds
 - New synthetic cannabinoids discovered

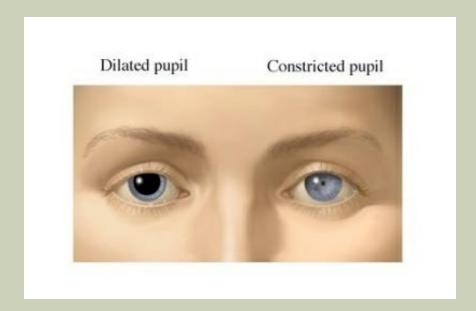




(knockoff)

MARIJUANA, MARIJUANA SYNTHETICS: EFFECTS

- Physical
 - Rapid onset
 - Dilated pupils
 - Time distortion
 - Speech may be confused and non-responsive



MARIJUANA, MARIJUANA SYNTHETICS: EFFECTS, CON'T

- Social/Emotional
 - Bouts of laughter
 - Interference with color and sound



http://beckyland.wo rdpress.com/tag/sy nesthesia/

MARIJUANA, MARIJUANA SYNTHETICS: EFFECTS, CON'T

- Behavioral
 - Increased appetite
 - Cognitive deficiencies
 - In vulnerable individuals:
 - May lead to psychosis
 - May deepen depression

MARIJUANA SYNTHETICS: SIGNIFICANT RISKS

Addiction

- Anandamide influence
- High potency more activity in CB1 and CB2 sites
- May lead to dependency and addiction
- Tolerance
- Withdrawal
- Compulsion
- Loss of Control
- Continued Use Despite Consequences

MARIJUANA SYNTHETICS: SIGNIFICANT RISKS, CONT

- Non-responsive
 - High dose no divided attention
 - Operation of any moving vehicle
 - 2x more likely to have accident
 - Not attentive to environmental risks



- Cognitive impact
 - Measurable impact on memory and learning
 - IQ drop in early age onset
 - Potential paranoia and/or psychotic in vulnerable individuals

MARIJUANA SUBSTITUTES: RISKS

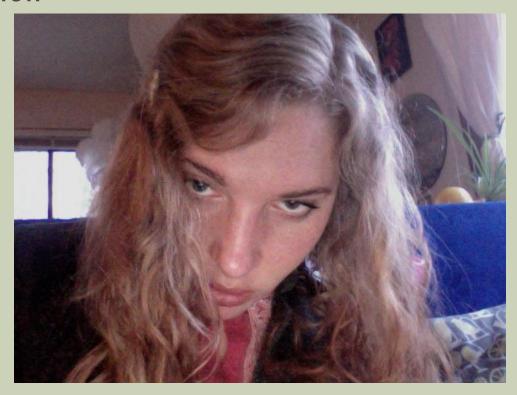
- Lung function
 - Joints, blunts, pipes, bongs
 - Vaporizers
- Unknown herbal products
 - Damiana
 - Yerba Mate
- Loaded Blunts
 - Herbals plus smokable:
 - Marijuana
 - Heroin, H-Bomb
 - Cocaine, Coco Puffs
 - Methamphetamine, M&Ms
 - Ketamine, Water





MARIJUANA SUBSTITUTES: EFFECTS

- Physical
 - Mild mental stimulation
 - Body relaxation
- Social/Emotional
 - Relaxation
 - Laughter
- Behavioral
 - Disconnected



MARIJUANA FORUMS

MJ-Xchange is your Lifestyle Community

MJ-Xchange provides an interactive forum for members to socialize, share ideas, life events, news, network and make friendships. The site was created for members, by members and will continually evolve to meet members desires.

SIGN UP

IDAHO MILE MARKER



MARKETING MARIJUANA: CLOTHING, JEWELRY, TATOOS







NEW FORMATS







NEW PRODUCTS

Marijuana edibles







THE HEALTHY ALTERNATIVE





NEW PRODUCTS: DABBING

- Butane Hash Oil
- Amber, Shatter, Ear Wax





NEW PRODUCTS

- Cloud 9
- AB-PINACA + Others
- Synthetic Cannabinoids
 - High Potency
 - Dabbing
 - E-pens
 - Beverages



- Extractions always increase risk for bad outcomes!
- Addiction, Overdose, Accidental Death

DEVICES



SOCIAL, EMOTIONAL COGNITIVE

- Internalize new skills
 - Neural pathways and chemistry
 - How to learn
 - How to manage emotions
 - How to behave



CONCERNS

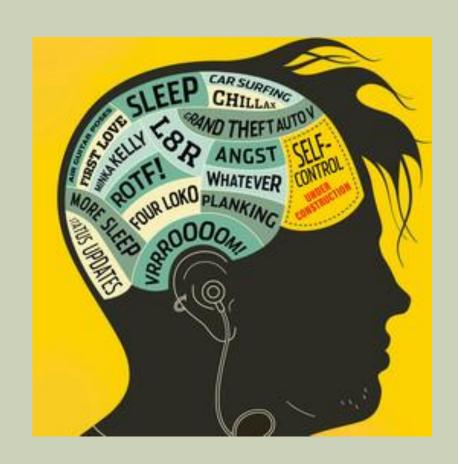
- Brain Changes Related to Substance Abuse
 - Reward System Shutdown
 - Systemic Chemical Change
 - CREB

- Embedded Emotional Memory
 - New Protein Activity
 - PKMzeta



LIFE CHANGES

- Limited Practice Skills
 - Medicate for Feelings
 - No Life Skills
 - Social/Emotional
 - Relationship
- Adult Brain
 - Less Fire Power
 - Harder Work



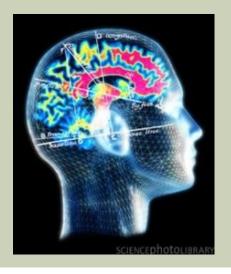
TALKING THE TALK

- Legal Status
 - 21 and over
 - Limited amount
 - No vehicle operation
 - No public use



Impact on Brain Development

College Campus



TALKING THE TALK

- Conversation not Lecture
 - Use active listening
 - Use "I" statements



Don't be surprised at resistance

FOCUS ON THE FOLLOWING

Impact of Marijuana on Learning

Impact of Marijuana on Lifestyle

Impact of Marijuana on Health



FOCUS ON MESSAGE

Don't get high and Drive

Don't get high and Drink

Don't get High before School

Don't get High Pregnant

